

PROJECT: 18-1558 DEV, SPRUCE RAILROAD TRAIL - FINAL PHASE

Sponsor: Clallam Co Public Works Dept Program: WWRP - Trails Status: Active Project Start Date: 07/01/2019 Agreement End Date: 12/31/2021

Final Report Status: Accepted 12/28/2020

Description

PROJECT AGREEMENT DESCRIPTION

Clallam County will use this grant to for the final phase of the Spruce Railroad Trail that will complete the construction of the last two miles of the historic 1918 Spruce Railroad Grade located between the McFee Tunnel (restored 2017) and the Daley-Rankin Tunnel (restored 2019) within the Olympic National Park. The rocking and paving effort will also extend the trail an additional 0.2 miles north down the Lyre Ravine on the historic Spruce Railroad Grade alignment. The restored 8-foot wide trail includes extensive rock fall protection measures, crib wall restoration and a new bridge near the Daley-Rankin Tunnel. This trail is a segment of the Olympic Discovery Trail. The primary outdoor recreation opportunity provided by this project will be non-motorized trail use.

FINAL PROJECT DESCRIPTION

The Spruce Railroad Trail (SRRT) Final Phase Project constructed the last approximately, two miles of the historic 1918 Spruce Railroad Grade in Olympic National Park (ONP) located between the McFee Tunnel (Restored 2017) and the Daley-Rankin Tunnel (Restored 2020). This effort included: (1) tree felling, clearing, and grubbing; (2) mechanically stabilized earth (MSE) walls and other shoreline stabilization construction; (3) extensive rockfall scaling, reinforcement (e.g. bolts, dowels, attenuators), protection (e.g., draped wire mesh), and other rockfall mitigation; (4) trail subgrade preparation; (5) drainage improvements (e.g., culverts); and (6) installation of a new 120-foot long, by 12-foot wide trail bridge on the east approach to the newly restored Daley-Rankin Tunnel. The remaining work to restore the Daley-Rankin Tunnel was also completed concurrently with the trail construction between the tunnels with funding support under RCO WWRP Trails Project #16-1390.

The project also completed final surfacing of the approximately four miles of trail between the SRRT Lyre River Trailhead (end of East Beach Road) and the North Shore Trailhead (end of Camp David Junior Road) access points. This effort included final surfacing of: (1) the 1.8 miles of new constructed trail between the two tunnels; (2) the trail within the two tunnels; and (3) the remaining unpaved SRRT segments between the Lyre River Trailhead and the McFee Tunnel and the Daley-Rankin Tunnel and the North Shore Trailhead. The final trail surface is characterized by a minimum 13 to 14-foot wide dual tread surface comprised of a minimum 8-foot wide paved asphalt path bordered by 4-foot wide and 1 to 2-foot wide crushed stone/gravel tread sides. In addition, numerous pull-outs were constructed and surfaced (paved or crushed stone/gravel) increasing the effective tread width at those locations.

Over 20 new trail information and warning signs at and between the Lyre River and North Shore Trailheads were installed. These signs addressed trail route identification, trail courtesy rules, information warning signs (e.g., low light in tunnel, rockfall areas, speed limits), and other information.

Other supporting facility improvements in 2020 completed concurrent with the final phase SRRT construction included a parking lot expansion at the Lyre River Trailhead Access. Parking improvements added 18 vehicle spaces, two ADA parking spaces, and two large parallel parking spaces that can accommodate larger vehicles/trailers (e.g., horse trailers). The trailhead parking area now has a total of 53 marked spaces, a designated RV parking area, picnic tables, and a pit toilets.

The trail re-opened to the public on November 28, 2020 and this SRRT Final Phase Project concluded the multi-year ODT-SRRT effort (supported by four RCO grants) to construct a paved, approximately 10-mile ODT-SRRT segment around the north shore of Lake Crescent in ONP as a universally accessible, multi-purpose trail to be shared by hikers, bicyclists, equestrians, and people traveling in wheelchairs.

Work accomplishment and photo highlights from the project start to end (March – November 2020) are featured in the attached document titled: "Weekly Project Progress Newsletter Reports." Also, see the series of attached final photos that highlight the final trail tread, pull-outs, shoreline stabilization structures, new 12-foot wide trail bridge, drainage improvements (culverts), expanded parking lot, and signage additions. See also the attached news articles of the trail ribbon cutting event and trail opening.

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Questions

#1: Describe the location of where the RCO funding acknowledgement sign is displayed at the site.

Description is required

Signs were placed on the kiosk at the Spruce Railroad Trail, Lyre River Trailhead Access at the end of East Beach Road and on the kiosk at the trailhead access at the end of Camp David Junior Road. These sign extents incorporate the approximately 1.8-miles of constructed new trail between the tunnels as part of this final phase and also the project areas under RCO WWRP Grant Project #s: 16-1390 and 14-1124 that also supported completion of the Spruce Railroad Trail. The sign placement on each kiosk can be viewed in the attached final photos named RCO Funding Sign (East-End) and RCO Funding Sign (West-end).

#2: Is there an opening ceremony or ribbon cutting event planned or has one already occurred?

Description is required

Yes

A ribbon cutting event was held on October 29, 2020. Representatives from Clallam County, Olympic National Park, RCO, and Peninsula Trails Coalition were part of the event presentation speakers. Others present included the Federal Highway Administration (project construction managers), contractor representatives, and special invitees. Attendance was by invite only and limited in number to comply with COVID-19 requirements. The event was video taped and covered by local press. See the attached news articles of the trail ribbon cutting event and trail opening.

#3: Is there anything else about this project you would like to clarify or explain?
No

Optional

#4: Was the project's original design modified? If yes, explain the major changes here and attach the new design document (As Built) in PRISM.

Optional

No

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Worksites

Worksite #1: Spruce Railroad Trail and Grade in ONP Boundary

Worksite Address (Optional)

Street Address 4150 East Beach Road

City Port Angeles State, Zip WA 98362

Worksite Details

Worksite #1: Spruce Railroad Trail and Grade in ONP Boundary

Worksite Name Spruce Railroad Trail and Grade in ONP Boundary

WORKSITE DESCRIPTION

The worksite included the approximately four-mile, Spruce Railroad Trail segment along the north shore of Lake Crescent in Olympic National Park located between the Lyre River Trailhead (end of East Beach Road) and the North Shore Trailhead (end of Camp David Junior Road). The activities conducted between these two trailhead access points included: 1) the construction of 1.8-miles of new trail between the McFee Tunnel (Restored 2017) and the Daley-Rankin Tunnel (Restored 2020); 2) four miles of final dual tread trail surfacing (asphalt and gravel); and 3) parking improvements at the Lyre River Trailhead. The remaining work to restore the Daley-Rankin Tunnel as part of the trail route was also completed concurrently with the trail construction and funding support under RCO WWRP Trails Project #16-1390.

Geographic Coordinates

From mapped point: Latitude 48.066284 Longitude -123.808427

For Directions: Latitude 48.093236 Longitude -123.802159

SITE ACCESS DIRECTIONS

The most direct route to the east side of the worksite is normally by heading west from Port Angeles on US 101 for 12 miles to the intersection of East Beach Road and then take East Beach Road for 4.1 miles to the Spruce Railroad Trail (SRRT), Lyre River Trailhead. However, access to the Lyre River Trailhead via East Beach Road from US 101 is currently closed due to debris fall hazards. The alternative access to the Lyre River Trailhead is off of SR 112 in the community of Joyce. It can be accessed by heading south on the Joyce-Piedmont Road off of SR 112 in Joyce to the intersection with East Beach Road in Olympic National Park and then continue west on East Beach Road to the trailhead. The Lyre River Trailhead is the main direct access to the SRRT and has a large parking lot at the trailhead.

The west end of the work site is accessed off of US 101 by turning onto Camp David Junior Road about 0.2 miles from the west-side of Lake Crescent in Olympic National Park and continuing for about 4.3-miles to the end of the road at the SRRT North Shore Trailhead Access.

Properties

Worksite #	Worksite Name	Property Name	Sponsor Verified	RCO Verified	RCO Verified Map
1	Spruce Railroad Trail and Grade in ONP Boundary	Spruce Railroad Trail and Grade	✓	✓	N/A

Development Metrics

Current Agreement Final

Worksite: Spruce Railroad Trail and Grade in ONP Boundary (#1)

Equestrian

Develop equestrian facilities

Total cost for Develop equestrian facilities		\$5,000	Not Colle	ected at Clos	ure
No webs works as weeks	New	Renovate	New	Renovate	
Number of corrals		0 0		0	0

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	Final Report, Project 18-	15	58		
Number of loading ramps			1	0	Note: No new loading ramp was installed as part of this project. The trail like many others in Olympic National Park (ONP) is open to equestrian use. It is anticipated that equestrian amenities determined to be needed in the future will be identified by ONP and installed by ONP and/or through partnerships with volunteer groups such as the Backcountry Horsemen of Washington. The final project included expanding the Lyre River Trailhead Parking Area concurrent with trail improvements, including adding two larger paved parking spots areas that can accommodate horse trailers. This is in addition to a designated and marked paved area in other recent trailhead parking lot improvements for horse trailers and other large vehicles (e.g., RV's).
Select the equestrian amenities		✓	Highlines Hitching posts Watering facilities None		Highlines Hitching posts Watering facilities ✓ None Note: No new hitching post was installed as part of this project. The trail like many others in Olympic National Park (ONP) is open to equestrian use. It is anticipated that equestrian amenities determined to be

needed in the future will be identified by ONP and installed by ONP and/or through partnerships

The final project included expanding the Lyre River Trailhead Parking Area concurrent with trail

improvements, including adding two larger paved parking spots areas that can accommodate horse trailers. This is in addition to a designated and marked paved area in other recent trailhead parking lot improvements for horse trailers and other large vehicles (e.g., RV's).

with volunteer groups such as the Backcountry Horsemen of Washington.

General Site Improvements
Install signs/kiosk

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in e the state of	\$20,000 Note: Interpretive panels will inform the public about the endangered marbled murrelets that nest near the project site in old growth timber. Additional panels will relate the origin of the Beardsley Trout, a species of bright blue colored trout found only in Lake Crescent as a result of the landslide that landlocked these formerly ocean going salmon thousands of years ago. Additional panels will relate the interesting history of the Spruce Railroad Grade, its tunnels and the workers that built it during World War 1.	Not Collected at Closure
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Enter the number of signs / kiosks

	Number		Number
Directional / wayfinding signs		Directional / wayfinding signs	5
Informational signs		Informational signs	6
Interpretive signs	6	Interpretive signs	
Kiosks		Kiosks	2
Permanent entrance signs		Permanent entrance signs	2
Other signs		Other signs	6
Total	6	Total	21

Note: The Lyre River Trailhead and North Shore Trailhead access points to the Spruce Railroad Trail (SRRT) that served as the work site east and west ends, respectively had kiosks (see attached photos showing RCO funding signs) previously installed. Near the start of both of these trailheads, a SRRT entrance sign was added, and under this sign an Olympic Discovery Trail route sign was added on the same post. In addition, near the trail start of both trailheads several information signs were installed that contained trail courtesy rules and other trail information (e.g., dogs on leash only, unlit tunnel ahead, etc...), and trail speed limit (15 mph) were also installed. A SRRT parking area sign was added at the Lyre River Trailhead. Other signs installed between the two trailheads included warning signs of rockfall areas and low lighting in tunnels. A wayfinding signs were installed near the entrances of the McFee Tunnel identifying a popular, short natural tread trail (i.e., Devils Punchbowl Trail) side trail in the tunnel area to avoid confusion. It is anticipated that in the future that Olympic National Park will add additional informational and interpretive signage at trailhead kiosks and along the SRRT. See attached final photos of examples of added signs near trailheads and along the trail.

Shoreline protection

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	 •				
Total cost for Shoreline protection		Note: A majority of this cost is directed at replacing the failed log cribbing walls that supported the railroad grade. Log cribbing was utilized by the early railroad engineers as a means to construct a stable, low cost wall structure where space between the Lake and the adjacent cliffs was to narrow to construct a normal fill slope on the Lake side. The logs in these log cribbing areas has rotted away resulting in the walls failing and collapsing into the Lake which narrows the trail to only several feet of width. The log cribbing wall structures will be replaced by rock wall and fill wall construction techniques that will provide stable support for the trail and will not erode or wash into the Lake.		Not Collected at Closure	
Linear feet of shoreline protection			2,000		2,000
Select the shoreline protection type			Boulders Bulkhead Log boom Plantings/vegetation Retaining wall Rip rap Rock armor Seawall Sheet piles	✓	Boulders Bulkhead Log boom Plantings/vegetation Retaining wall Rip rap Rock armor Seawall Sheet piles

Site Preparation

General site preparation

p w n b F e b s E s s c e	\$1,200,000 Note: Included in the site oreparation costs are \$1,000,000 worth of rock fall protection measures that need to be installed both east and west of the Daley-Rankin Tunnel. The 130 foot tall exposed cliffs in this area have been dropping rocks ranging in size from baseballs to Volkswagon Beetles. These cliffs will be the site of rock fall protection measures that include hand scaling of all loose rock by climbers using rock bars and expansion pillows. Additionally, arge blocks that could loosen in	Not Collected at Closure
Acres of site preparation	10.50	10.50

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Number of trail miles for site preparation	4.20	4.00
		Note: The project completed the final surfacing of the approximately four miles between the SRRT Lyre River Trailhead (end of East Beach Road) and the North Shore Trailhead (end of Camp David Junior Road) access points. This effort included final surfacing of: (1) the 1.8 miles of new constructed trail between the two tunnels; (2) the trail within the two tunnels; and (3) the remaining unpaved SRRT segments between the Lyre River Trailhead and the McFee Tunnel and the Daley-Rankin Tunnel and the North Shore Trailhead. Refreshing of the previously constructed crushed rock surfacing was needed and done prior to paving the trail sections east of the McFee tunnel and west of Daley-Rankin Tunnel. The final trail surface is characterized by a minimum 13 to 14-foot wide dual tread surface comprised of a minimum 8-foot wide paved asphalt path bordered by 4-foot wide and 1 to 2-foot wide crushed stone/gravel tread sides. In addition, numerous pullouts were constructed and surfaced (paved or crushed stone/gravel) increasing the effective tread width at those locations. See attached final photos of trail tread and pull-out examples. The additional 0.2 miles of the Spruce Railroad grade located within Olympic National Park (ONP) that continues north within the Lyre River Ravine off of East Beach Road as part of the 3.5-mile gravel road segment of the Olympic Discovery Trail (ODT) was not paved. It begins about 0.3 miles north of the SRRT Lyre River Trailhead access, and remains subject to limited vehicle access associated with timber harvesting improvements of this shared access road and ODT aligned along the historic railroad grade, including the 0.2 mile ONP segment, will be considered in the future subject to available funding under the grant. Future surfacing improvements of this shared access road and ODT aligned along the historic railroad grade, including the 0.2 mile ONP segment, will be considered in the future subject to available funding
Buildings / structures to be demolished	0	future subject to available funding. 0
Select the site preparation activities	Demolition	Demolition
	✓ General site prep activities ✓ Mobilization Removal of piling Surveying Traffic control ✓ Other	✓ General site prep activities ✓ Mobilization Removal of piling Surveying Traffic control ✓ Other
	34101	Calor

Trails

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Trail development

Total cost for Trail development		\$1,800,000	Not Collected at	Closure
Miles of hard surfaced trail developed / renovated by surface type	Asphalt	Miles 2.00	Asphalt	Miles 4.00
	Boardwalk		Boardwalk	
	Concrete		Concrete	
	Crushed stone		Crushed stone	
	Recycled materials		Recycled materials	
	Resin based stabilized material		Resin based stabilized material	
	Soil Cement		Soil Cement	
	Other hard surface		Other hard surface	
	Total	2.00	Total	4.00

Note: The project completed the final surfacing of the approximately four miles between the SRRT Lyre River Trailhead (end of East Beach Road) and the North Shore Trailhead (end of Camp David Junior Road) access points. This effort included final surfacing of: (1) the 1.8 miles of new constructed trail between the two tunnels; (2) the trail within the two tunnels; and (3) the remaining unpaved SRRT segments between the Lyre River Trailhead and the McFee Tunnel and the Daley-Rankin Tunnel and the North Shore Trailhead. Refreshing of the previously constructed crushed rock surfacing was needed and done prior to paving the trail sections east of the McFee tunnel and west of Daley-Rankin Tunnel. The final trail surface is characterized by a minimum 13 to 14-foot wide dual tread surface comprised of a minimum 8-foot wide paved asphalt path bordered by 4-foot wide and 1 to 2-foot wide crushed stone/gravel tread sides. In addition, numerous pullouts were constructed and surfaced (paved or crushed stone/gravel) increasing the effective tread width at those locations. See attached final photos of trail tread and pull-out examples.

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Miles of natural surfaced trail developed / renovated by surface type	N. C.	Miles	N. I. C	Miles
	Natural surface	0.20	Natural surface	0
	Wood chip /		Wood chip /	
	engineered wood		engineered wood	
	fiber		fiber	
	Other natural surface		Other natural surface	
	Total	0.20	Total	0
			Note: No new nat surface was devel approximately 250 established natural already provided I East Beach Road side of the Lyre R crossing approxim from the Spruce F Lyre River Trailhe Area. This short trapick access to the headwaters of also for launching canoes, stand-up other personal was limited roadside p drop-off areas alo Beach Road shouthis trail. See the attitled Photo - Water Natural Tread Trail of the trail to the law Spruce Railroad Tof the McFee Tun Devils Punch Bow the lake is a popular hoad-in spot for showing as part of this projectional signag as part of this proposition of the purposition of the popular of the popular of the popular of the swimming and div Directional signag as part of this projectional signag as part of this projectional spruce Railround Reviews Popular of this projectional signag as part of this projectional signag as part of this projectional spruce Railround Reviews Popular Rev	loped. A short D-foot long, al tread trail lake access off on the north-tiver Bridge nately 800 feet Railroad Trail, and and Parking rail is popular for le lakeshore at f Lyre River and a kayaks, boards, and atercraft. There is tarking or boat and the East alder to access attached photo eer Access il showing a partake shore. Tuce Railroad Project, the Park retained ile natural tread all side trail along at connects to the Trail at both endinel. Where the all trail meets the hike, bike, and noreline access, ring activities. It was installed ject to mark the

Devils Punch Bowl Trail access points off the SRRT and also to alert SRRT users that the Devils Punch Bowl trail is not suitable for wheel chairs. See the attached photo titled: Photo-Devil Punch Bowl Trail showing the installed Devils Punch Bowl sign and access point on the east side of the McFee Tunnel.

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Is this a dual tread trail

✓ Yes

No

No

Note: The project completed the final surfacing of the approximately four miles between the SRRT Lyre River Trailhead (end of East Beach Road) and the North Shore Trailhead (end of Camp David Junior Road) access points. This effort included final surfacing of: (1) the 1.8 miles of new constructed trail between the two tunnels; (2) the trail within the two tunnels; and (3) the remaining unpaved SRRT segments between the Lyre River Trailhead and the McFee Tunnel and the Daley-Rankin Tunnel and the North Shore Trailhead. Refreshing of the previously constructed crushed rock surfacing was needed and done prior to paving the trail sections east of the McFee tunnel and west of Daley-Rankin Tunnel. The final trail surface is characterized by a 14-foot wide dual tread surface comprised of an 8-foot wide paved asphalt path bordered by 4-foot wide and 2foot wide crushed stone/gravel tread sides. In addition, numerous pull-outs were constructed and surfaced (paved or crushed stone/gravel) increasing the effective tread width at those locations. See attached final photos of trail tread and pull-out examples.

rail design profile		Number
	Tread width	13
	(feet)	
	Shoulder width	3
	(feet)	
	Cross-slope	2
	(percent)	
	Running slope	
	(percent)	

	Number
Tread width	13
(feet)	
Shoulder width	4
(feet)	
Cross-slope	2
(percent)	
Running slope	
(percent)	

Note: The final trail surface is characterized by a minimum 13 to 14-foot wide dual tread surface comprised of a minimum 8-foot wide paved asphalt path bordered by 4-foot wide and 1 to 2-foot wide crushed stone/gravel tread sides. In addition, numerous pullouts were constructed and surfaced (paved or crushed stone/gravel) increasing the effective tread width at those locations. See attached final photos of trail tread and pull-out examples.

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Select the trail structures	✓ Culverts Fords ✓ Pull-outs Puncheon ✓ Retaining walls Stairs Switchbacks Turnpike Water bars None	✓ Culverts Fords ✓ Pull-outs Puncheon ✓ Retaining walls Stairs Switchbacks Turnpike Water bars None
Number of at-grade road / street crossings in this project	1	1
Controls used for road / street crossings	No road / street crossings ✔ Bollards / gates Pavement markings Pedestrian signal ✔ Signs Speed bumps Traffic buttons Other road / street crossing controls	No road / street crossings Bollards / gates Pavement markings Pedestrian signal Signs Speed bumps Traffic buttons Other road / street crossing controls Note: The Spruce Railroad Trail (SRRT), Lyre River Trailhead access starts at the Lyre River Parking area at the end of East Beach Road in Olympic National Park. The SRRT is part of the Olympic Discovery Trail (ODT) route. The ODT continues north about 0.3 miles on East Beach Road before turning onto a gravel road that continues up the Lyre River Canyon mostly along the historic railroad grade. The start of the trail at the Lyre River Trailhead and Parking Area off of East Beach Road contains trail bollards and signage to control vehicle access. See attached photo showing trail bollard/signage at the SRRT Lyre River Trailhead.
Project involve painting, striping, or other trail/pavement marking (yes/no)	No	No
Trail bridge development		
Total cost for Trail bridge development	\$400,000	Not Collected at Closure
Number of trail bridges	New Renovate 1 0	New Renovate 1 0
Select the bridge types	Aluminum Cable suspension Concrete Glulam Log Railroad trestle ✓ Steel Wood Other	Aluminum Cable suspension Concrete Glulam Log Railroad trestle Steel Wood Other
Provide the length and width of each bridge (feet)	120 feet long and 12 feet wide	125 feet long and 12 feet wide Note: See attached trail bridge photo.

Water Access

Develop access point

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Total cost for Develop access point \$10,000 Not Collected at Closure Number of designated water access points Describe the designated water access point (stairs, ramp, etc.) A natural tread trail will be See Note. developed from the trailhead Note: A short approximately 250parking area to Lake Crescent for foot long, established natural tread Kayaks, canoes and Stand Up trail already provided lake access Paddleboards. off East Beach Road on the northside of the Lyre River Bridge crossing approximately 800 feet from the Spruce Railroad Trail, Lyre River Trailhead and Parking Area. This short trail is popular for quick access to the lakeshore at the headwaters of Lyre River and also for launching kayaks, canoes, stand-up boards, and other personal watercraft. There is limited roadside parking or boat drop-off areas along the East Beach Road shoulder to access this trail. See the attached photo titled Photo - Water Access Natural Tread Trail showing a part of the trail to the lake shore. As part of the Spruce Railroad Trail Final Phase Project, the Olympic National Park retained the popular 0.2-mile natural tread Devils Punch Bowl side trail along the lake shore that connects to the Spurce Railroad Trail at both ends of the McFee Tunnel. Where the Devils Punch Bowl trail meets the lake is a popular hike, bike, and boat-in spot for shoreline access, swimming and diving activities. Directional signage was installed as part of this project to mark the Devils Punch Bowl Trail access points off the SRRT and also to alert SRRT users that the Devils Punch Bowl trail is not suitable for wheel chairs. See the attached photo titled: Photo-Devil Punch Bowl Trail showing the installed Devils Punch Bowl sign and access point on the east side of the McFee Tunnel. The 1.8 miles of new trail construction between the McFee and Daley-Rankin tunnels as well as much of the approximately four miles of trail surface paving improvements part of this project provides many locations for disbursed physical access to the water edge.

Overall Metrics

Current Agreement Final

Trail Overview

Primary trail name	Spruce Railroad Trail	Spruce Railroad Trail
Alternate trail name	, ,	Olympic Discovery Trail - Spruce Railroad Trail Segment

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Total length of trail developed/renovated in the project 4.20 4.00 Note: The project completed the final surfacing of the approximately four miles between the SRRT Lyre River Trailhead (end of East Beach Road) and the North Shore Trailhead (end of Camp David Junior Road) access points. This effort included final surfacing of: (1) the 1.8 miles of new constructed trail between the two tunnels; (2) the trail within the two tunnels; and (3) the remaining unpaved SRRT segments between the Lyre River Trailhead and the McFee Tunnel and the Daley-Rankin Tunnel and the North Shore Trailhead. Refreshing of the previously constructed crushed rock surfacing was needed and done prior to paving the trail sections east of the McFee tunnel and west of Daley-Rankin Tunnel. The final trail surface is characterized by a minimum 13 to 14-foot wide dual tread surface comprised of a minimum 8-foot wide paved asphalt path bordered by 4-foot wide and 1 to 2-foot wide crushed stone/gravel tread sides. In addition, numerous pullouts were constructed and surfaced (paved or crushed stone/gravel) increasing the effective tread width at those locations. See attached final photos of trail tread and pull-out examples.

How many new trail miles will be created as the result of this project

4.20 4.00

Note: The project completed the final surfacing of the approximately four miles between the SRRT Lyre River Trailhead (end of East Beach Road) and the North Shore Trailhead (end of Camp David Junior Road) access points. This effort included final surfacing of: (1) the 1.8 miles of new constructed trail between the two tunnels; (2) the trail within the two tunnels; and (3) the remaining unpaved SRRT segments between the Lyre River Trailhead and the McFee Tunnel and the Daley-Rankin Tunnel and the North Shore Trailhead. Refreshing of the previously constructed crushed rock surfacing was needed and done prior to paving the trail sections east of the McFee tunnel and west of Daley-Rankin Tunnel. The final trail surface is characterized by a minimum 13 to 14-foot wide dual tread surface comprised of a minimum 8-foot wide paved asphalt path bordered by 4-foot wide and 1 to 2-foot wide crushed stone/gravel tread sides. In addition, numerous pullouts were constructed and surfaced (paved or crushed stone/gravel) increasing the effective tread width at those locations. See attached final photos of trail tread and pull-out examples.

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Total length of continuous trail after this project is complete	90.00	90.00
	Note: There are 37 miles of contiguous trail between the east county line of Clallam County and the Elwha River. There are 25 miles of contiguous trail between the Elwha River and the Lyre River Trailhead on Lake Crescent. The Spruce Railroad is 4 miles long at Lake Crescent. The restored Spruce Railroad Grade located west of the Spruce Railroad Trail add an additional 16 miles of contiguous trail to the Camp Creek Trailhead on Cooper Ranch Road. Additionally, there are 8 miles of contiguous trail in Jefferson County from the Port Townsend Marina to the 4 corners are near	
Designed trail use	Highway 20. ✓ Bicycle	✓ Bicycle
besigned trail dec	Pedestrian	Pedestrian
	Equestrian	Equestrian
Managed trail uses	✓ Equestrian✓ Hiking/walking✓ Mountain bikingSnow trail - nonmotorized	 ✓ Bicycle ✓ Equestrian ✓ Hiking/walking ✓ Mountain biking ✓ Snow trail - nonmotorized ✓ Other nonmotorized
Trail plan	Collected on Application	Not Collected at Closure
Sites Improved		
Project acres developed	1.00	1.00
Project acres renovated	9.00	9.00
Completion Date		
Projected date of completion	10/29/202 ⁻	11/28/2020

Development Costs

Final amounts include a pending billing Date of Last Released Billing 10/02/2020 Final

Worksite: Spruce Railroad Trail and Grade in ONP Boundary (#1)					
SPLIT OUT FINAL TOTAL BELOW	\$4,185,000.00	\$4,689,825.62			

Proposed

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\$5,000

\$0

Note: The final project included expanding the Lyre River Trailhead Parking Area concurrent with trail improvements, including adding two larger paved parking spots areas that can accommodate horse trailers. This is in addition to a designated and marked paved area in other recent trailhead parking lot improvements for horse trailers and other large vehicles (e.g., RV's).

No additional loading ramp or hitching post was installed along the Spruce Railroad Trail at this time. The trail like many others in Olympic National Park (ONP) is open to equestrian use. It is anticipated that equestrian amenities determined to be needed in the future will be identified by ONP and installed by ONP and/or through partnerships with volunteer groups such as the Backcountry Horsemen of Washington.

\$770.000

General Site Improvements Costs

Note: These costs are associated with trail preparation associated with construction of retaining walls and shoreline stabilization.

\$1,200,000

\$1,235,002

\$840.275

Note: Site preparation costs included mobilization, survey/staking, quality control, testing, contractor scheduling, erosion control, clearing/grubbing, roadway excavation, traffic control, and other site improvement costs.

\$2,200,000

\$2,614,549

Note: Trail costs included bridge abutments, bridge, rockfall mitigation, subgrade aggregate, culverts, restoration (i.e., put back topsoil, mulching), and final dual

tread surfacing.

Site Preparation Costs

Equestrian Costs

Trails Costs

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\$10,000

Note: A short approximately 250foot long, established natural tread trail provides lake access off East Beach Road on the north-side of the Lyre River Bridge crossing approximately 800 feet from the Spruce Railroad Trail, Lyre River Trailhead and Parking Area. This short trail is popular for quick access to the lakeshore at the headwaters of Lyre River and also for launching kayaks, canoes, stand-up boards, and other personal watercraft. There is limited roadside parking or boat drop-off areas along the East Beach Road shoulder to access this trail. See the attached photo titled Photo - Water Access Natural Tread Trail showing a part

of the trail to the lake shore.

\$0

As part of the Spruce Railroad Trail Final Phase Project, the Olympic National Park retained the popular 0.2-mile natural tread Devils Punch Bowl side trail along the lake shore that connects to the Spurce Railroad Trail at both ends of the McFee Tunnel. Where the Devils Punch Bowl trail meets the lake is a popular hike, bike, and boat-in spot for shoreline access, swimming and diving activities. Directional signage was installed as part of this project to mark the Devils Punch Bowl Trail access points off the SRRT and also to alert SRRT users that the Devils Punch Bowl trail is not suitable for wheel chairs. See the attached photo titled: Photo-Devil Punch Bowl Trail showing the installed Devils Punch Bowl sign and access point on the east side of the McFee Tunnel.

The 1.8 miles of new trail construction between the McFee and Daley-Rankin tunnels as well as much of the approximately four miles of trail surface paving improvements part of this project provides many locations for disbursed physical access to the water edge.

Difference \$0

Water Access Costs

Billed Summary

Final amounts include a pending billing Date of Last Released Billing 10/02/2020

	Project Ag	greement		Totals To Date	
Category	RCO	Total	Expended	Non Reimbursable	Total Billed
Development					
Construction	1,999,950.00	4,185,000.00	4,689,825.62		4,689,825.62
AA&E					
Development Total	1,999,950.00	4,185,000.00	4,689,825.62		4,689,825.62
Total	1,999,950.00	4,185,000.00	4,689,825.62		4,689,825.62

Sponsor Match

Proposed Final

Project Funding

Value of federal funds leveraged	Collected at Closure		\$2,627,188.00
	Collected at Closure	Local	Dollars \$750,000
		State	\$1,999,950
Grant Funding Received		Federal	\$2,627,188
		Private	\$50,000
		Total	\$5 427 138

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Attachments

PHOTOS (JPG, GIF) Photos (JPG, GIF)











457305

457306

458137

458139

PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
	12/24/2020	Map: Boundary map – Final	GIS_SpruceRR_portion.zip	SteveG	GIS_SpruceRR_portion.zip, 458145 Final Report, 12/28/2020, Accepted	✓
کے	12/24/2020	Plans (As Built)	Spruce Railroad Trail Construction Plan	SteveG	Spruce Railroad Trail Construction Plan.pdf, 458144 Final Report, 12/28/2020, Accepted	√
	12/24/2020	Photo	Natural Tread Trail Near East Trailhead (12-10-20)	SteveG	Natural Tread Trail Near East Trailhead (12-10-20).jpg, 458143 Final Report, 12/28/2020, Accepted	√
	12/24/2020	Photo	New trail bridge (12-10-20)	SteveG	New trail bridge (12-10-20).jpg, 458142 Final Report, 12/28/2020, Accepted	✓
	12/24/2020	Photo	Dual Trail Segment Example One (12-10-20)	SteveG	Dual Trail Segment Example One (12- 10-20).jpg, 458141 Final Report, 12/28/2020, Accepted	√
	12/24/2020	Photo	Dual Tread & Pull-out Example Two (12-10-20)	SteveG	Dual Tread & Pull-out Example Two (12- 10-20).jpg, 458140 Final Report, 12/28/2020, Accepted	√
	12/24/2020	Photo	Dual Tread & Pull-out Example 3 (12-10-20)	SteveG	Dual Tread & Pull-out Example 3 (12-10- 20).jpg, 458139 Final Report, 12/28/2020, Accepted	✓
	12/24/2020	Photo	Devil Punchbowl Side Trail-Sign (12-10-20)	SteveG	Devil Punchbowl Side Trail-Sign (12-10- 20).jpg, 458138 Final Report, 12/28/2020, Accepted	√
	12/24/2020	Photo	East Trailhead Access Control-Signs (12-10-20)	SteveG	Lyre River Trailhead Access Control- Signs (12-10-20).jpg, 458137 Final Report, 12/28/2020, Accepted	√
	12/16/2020	Photo	RCO Funding Sign (West-End)	SteveG	RCO Sign West (12-10-20).jpg, 457306 Final Report, 12/28/2020, Accepted	✓
	12/16/2020	Photo	RCO Funding Sign (East-End)	SteveG	RCO Sign East (12-10-20).jpg, 457305 Final Report, 12/28/2020, Accepted	✓
<u>}</u>	12/16/2020	News Article	Trail Ribbon Cutting Event Article	SteveG	SRRT Ribbon Cutting Event Article.pdf, 457231 Final Report, 12/28/2020, Accepted	√
<u>J</u>	12/16/2020	News Article	Local Article on Trail Opening	SteveG	SRRT Trail Open Article.pdf, 457222 Final Report, 12/28/2020, Accepted	✓
کے	12/16/2020	Milestones	Weekly Project Progress Newsletter Reports	SteveG	Project Newsletters.pdf, 457201 Final Report, 12/28/2020, Accepted	✓

Certify & Submit

Status History

Report Status	Date	User	
Accepted	12/28/2020	Beth Auerbach	
Submitted	12/24/2020	Steve Gray	
Draft	12/01/2020	Steve Gray	

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Note



PROJECT: 18-1558 DEV, SPRUCE RAILROAD TRAIL - FINAL PHASE

Sponsor: Clallam Co Public Works Dept Program: WWRP - Trails Status: Active Project Start Date: 07/01/2019 Agreement End Date: 12/31/2021

Property Basics

Acquisition **√** Development

Property Location

Property Name

Spruce Railroad Trail and Grade

Property Address

(optional)

City

State Zip

Property Description The project starts at the east end of North Shore Rd. and then goes east for 4 miles through the full extent of the

Spruce Railroad Trail and then 0.3 miles through the Lyre Trailhead and north for 0.2 miles up the Lyre River Ravine

on the Spruce RR Grade

Spruce Railroad Trail and Grade in ONP I Associated Worksite

Control and Tenure Landowner

National Park Service - Olympic National **Landowner Name**

(optional)

600 E Park Ave Address

City Port Angeles WA **Zip** 98362 State

Landowner Type Federal

Interagency Agreement **Instrument Type**

Timing Existing

Fixed # of years **Term Type**

#Yrs

Expiration Date 07/01/2068

Note

As a trail that is managed by Olympic National Park there is no time limit on the easement and it is likely that the term will

be perpetual provided that congress continues to fund

maintenance in the National Parks.

Parcel Numbers

County Name Parcel Number Mapped Notes (optional)

No parcels

Recording Numbers

Instrument Type Recording Number Notes

No recordings

Sponsor Clarification

√ The above information is correct and complete

RCO Notes

✓ Property data verified by RCO Staff

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Property Report: Spruce Railroad Trail and Grade (Worksite #1: Spruce Railroad Trail and Grade in **Attachments**

Shared

PHOTOS (JPG, GIF) Photos (JPG, GIF)

PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

Attach

File Name, Number **Attachment Type** Title Type Date Person **Associations**

No attachments match filter criteria

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